

PATENT COOPERATION TREATY

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PCT

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

(PCT Rule 43bis.1)

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|--|---|--|---|
| | | Date of mailing (day/month/year) | 20 October 2005 (20.10.2005) |
| Applicant's or agent's file reference GP10006-PC | | FOR FURTHER ACTION See paragraph 2 below | |
| International application No. PCT/KR 2004/002367 | International filing date (day/month/year) 16 September 2004 (16.09.2004) | | Priority Date (day/month/year) 19 September 2003 (19.09.2003) |
| International Patent Classification (IPC) or both national classification and IPC H04L 12/16, 12/28, G06F 0/00 | | | |
| Applicant INIMAX CO., LTD. | | | |

1. This opinion contains indications relating to the following items:

- Cont. No. I Basis of the opinion
- Cont. No. II Priority
- Cont. No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- Cont. No. IV Lack of unity of invention
- Cont. No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- Cont. No. VI Certain documents cited
- Cont. No. VII Certain defects in the international application
- Cont. No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

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Continuation No. I

IAP9 Rec'd PCT/PTO 16 MAR 2006

Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed.

Continuation No. V

Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

| | | |
|-------------------------------|-----------------------------|-----|
| Novelty (N) | Claims 1-18 | YES |
| | Claims ---- | NO |
| Inventive step (IS) | Claims 11-13, 15 | YES |
| | Claims 1-4, 5-10, 14, 16-18 | NO |
| Industrial applicability (IA) | Claims 1-18 | YES |
| | Claims ---- | NO |

2. Citations and explanations:

The following documents have been cited in the Search Report:

D1: US6081845 A
D2: US5708654 A
D3: EP0833485 A1

D1 features an address resolution protocol (ARP) server that controls communication between devices of a predetermined network by informing a calling terminal about an address to be used in communication with a receiving terminal according to various criteria, e.g. date and time, bandwidth or the like.

The present application features a communication control method wherein a device receives a manipulated data link layer address as a response to an ARP packet according to a set of communication rules. Considered novel is the fact that the transmission of an address chosen according to a certain rule is used to restrict communication between devices, but the choosing of an address to be transmitted as a response to an ARP request according to certain rules is shown in D1.

Accordingly, all relevant features of claims 1 to 2 and 18 are obvious to a person skilled in the art with respect to D1 and therefore do not involve an inventive step. The subject-matter of claims 3, 4, 14 and 16 to 17 are also considered obvious.

D2 shows a method in a LAN test instrument for detecting proxy ARP agents and misconfigured routers in a LAN. The LAN test instrument will typically compile a data base containing entries, with each entry containing a MAC and IP address pair corresponding to the devices on the LAN, typically through passive monitoring of traffic on the LAN and through active network requests to the devices on the LAN.

The present application features a communication control method wherein a step of collecting addresses is performed by the communication control apparatus, which receives an ARP packet broadcast by a device in the network and detects a network layer address and a data link layer address. Alternatively, the addresses are collected by listening to ARP response packets after sending an ARP request packet to a device in the network.

Therefore, the subject-matter of claims 5 to 10 do not involve an inventive step when D2 is combined with D1.

D3 features network communication using the address resolution protocol (ARP) in detail. However, it does not show the use of ARP for the restriction of communication between devices in a network and therefore merely represents the prior art.

The subject-matter of the present application is considered novel because none of the cited documents show all the relevant features of the present application. Due to the cited documents, claims 1 to 4, 5 to 10, 14 and 16 to 18 do not involve an inventive step.

Industrial applicability is given.